Suprascapula with five or six strong teeth. Opercular flap reaching about to front of spinous dorsal. Gill-rakers long, about two-thirds diameter of orbit.

Dorsal spines high and rather strong, but distinctly slenderer and more flexible than in C. armatus, their tips when depressed reaching considerably farther back than the tips of the pectorals or ventrals: third spine longest, a little less than half length of head; fourth spine but little shorter than third. Insertion of first dorsal spine a trifle nearer last ray of second dorsal than tip of snout. Second anal spine very long (slender and perfectly straight in two specimens, strong and curved in the others,) its tip about reaching base of caudal. It is much longer than third dorsal spine or than third anal spine, and is about 13 in length of head. Third anal spine about equal to first soft ray. Caudal fin well forked. Ventral fins long, reaching in most cases scarcely to the vent. Pectorals about equalling ventrals,  $1\frac{2}{3}$  in length of head, not reaching tips of ventrals. Vent about midway between base of ventrals and middle of base of anal.

Scales large, those in front of dorsal not crowded, 10 to 14 in number (16 to 18 in C. armatus); 5 series between lateral line and front of spinous

Head (with opercular flap)  $2\frac{2}{3}$  in length; depth  $3\frac{1}{2}$  ( $3\frac{1}{4}$  in C. armatus). D. VIII-I, 10; A. III, 6; scales, 5-51-9.

Color olivaceous, white below; lateral line pale. Membrane of anterior dorsal spines and of second and third anal spines blackish, as in C. armatus; pectorals and soft parts of vertical fins somewhat dusky; ventrals plain yellowish.

This species is rather common at Mazatlan, where numerous specimens were obtained. It reaches a length of about a foot, and is known to the fishermen as "Constantino" or "Robalito", the larger species of the genus, C. undecimalis and C. nigrescens, being called "Robalo".

Two specimens, 29228 from Mazatlan, and 28245 taken by Lieutenant Nichols at Acapulco, differ from the others in the following respects: The anal spine is shorter, slenderer, and perfectly straight, and the ventral fins are longer, reaching well past the vent, as in C. armatus.

INDIANA UNIVERSITY, December 2, 1881.

NOTES ON A COLLECTION OF FISHES MADE BY CAPTAIN HENRY E. NICHOLS, U. S. N., IN BRITISH COLUMBIA AND SOUTHERN ALASKA, WITH DESCRIPTIONS OF NEW SPECIES AND A NEW GENUS (Delolepis).

## By TARLETON H. BEAN.

In the summer of 1881 Captain Nichols made a voyage in command of the United States Coast and Geodetic Survey steamer Hassler, through the inland waters of British Columbia and Southern Alaska, during which he preserved for the United States National Museum 31 species

of fishes, all of which were received in excellent condition. Although Captain Nichols made no special effort to obtain all the species occurring in the region traversed, he succeeded in making some very important additions to our knowledge of the fauna. Hippoglossoides Jordani, Psettichthys melanostictus, and Xiphister mucosus have not previously been known to occur north of Puget Sound. Gymnacanthus galeatus was recorded with certainty only from Unalashka. Sebastodes paucispinis has had San Francisco as its northern limit. A new species of Gobius was obtained in Departure Bay, and a scaled genus of Cryptacanthidæ in Kingcombe Inlet, and at Wrangel. This goes to show what might be brought to light by a systematic search of the waters of Alaska.

It is due to Captain Nichols to say that no better-preserved lot of fishes has been received from any other collector.

## 1. Hippoglossus vulgaris Fleming.

29147 (120) juv. Sitka, Alaska, Sept. 13, 1881.

Length of specimen,  $11\frac{3}{5}$  inches. D. 103; A. 79, the last ray in each of these fins is double. The usual plumpness characteristic of Alaskan halibut is maintained.

## 2. Hippoglossoides Jordani Lockington.

29810 (90). Safety Cove, British Columbia, Aug. 4, 1881.

Length 14 inches. D. 99; A. 77, the last four rays of each of these fins being split. Teeth of upper jaw in two rows, the outer row having stronger teeth. Lower jaw with one row of teeth.

Taken in 16 fathoms of water. Not previously known to occur north of Puget Sound.

# 3. Psettichthys melanostictus Girard.

29809 (107). Wrangel, Alaska, Aug. 16, 1881.

Length  $12\frac{1}{2}$  inches. D. S1; A. 59. The first known instance of its capture in Alaska.

# 4. Limanda aspera (Pallas) Bean.

29146 (110). Wrangel, Alaska, Sept. 13, 1881.

A single example,  $6\frac{1}{5}$  inches long. On the eyed side are numerous small black blotches, involving the dorsal, anal, and caudal as well as the body. This species has the lemon color on the posterior part of the blind side just as in *L. ferruginea*. I have again compared aspera with ferruginea, and find that they are certainly congeneric.

# 5. Pollachius chalcogrammus (Pallas) Jordan & Gilbert.

29126 (82). Head of Kingcombe Inlet, Brit. Col., Aug. 2, 1881.

29127 (87). Head of Kingcombe Inlet, Brit. Col., Aug. 2, 1881.

29128 (104). Wrangel, Alaska, Aug. 17, 1881.

29126 is 10.7 inches long; 29127,  $11\frac{2}{5}$  inches; and 29128,  $11\frac{1}{5}$  inches. In these examples the eye is four-fifths as long as the snout. There are no traces of the pseudo stripes characteristic of the adult fish.

The first of these was caught in 18 fathoms, nearly fresh water.

#### 6. Gadus morrhua Linn.

29124 (80) juv. Drew's Harbor, Brit. Col. July 27, 1881. 29125 (114) juy. Kygani Straits, Alaska. Sept. 1, 1881.

No. 29124 is 9.7 inches long; No. 29125 measures 9 inches. There are 19 gill-rakers on the first branchial arch, the longest of them scarcely more than one-third as long as the eye. The fish are entirely free from external parasites.

No. 29124 was taken in 12 fathoms.

# Delolepis, new genus, Cryptacanthidae.

Body anguilliform, moderately compressed from the vent backward; provided with small, cycloid, imbricated scales.

Vent nearly median; a small anal papilla.

Lateral line continuous, nearly straight, slightly above the middle of the body in front of the vent, median from vent backward; it consists of a series of open pores without prominent raised tubes.

Head oblong, subquadrangular, shallow concave on the vertex, naked, with the muciferous channels well developed. Snout short, obtuse. Nostrils single, tubular, close behind the intermaxillars, in a horizontal line with the middle of the eye. Eyes small, encroaching on the dorsal outline, somewhat more prominent than in Cryptacanthodes, separated by a moderately wide interspace and surrounded by a series of shallow pits. Mouth wide, oblique, terminal, the lower jaw projecting beyond the upper.

Lips fleshy. Intermaxillars slightly protractile, with two rows of small conical teeth, re-enforced by a few larger ones at the symphysis behind the inner row. Mandibular teeth uniserial, larger than the intermaxillar, a few additional ones at the symphysis. Vomer and palate armed with a few moderately large teeth. Tongue smooth, adherent. A few shallow pits in the under surface of the mandible, continued in a series on the posterior border of the preoperculum. Operculum nnarmed.

Gill-openings wide, the membranes attached to a narrow isthmus, extending backward beyond the pectoral base, and without a projecting flap. Gills four, a wide slit behind the fourth; gill-rakers very short, obtuse, in moderate number. Pseudobranchiæ.

Branchiostegal rays, 6.

Pectoral fins short, their bases almost vertically placed and entirely below the middle of the body.

Dorsal fin commencing over the upper angle of the gill-opening and Proc. Nat. Mus. 81-30 Aug. 4, 1882.

continuous with the caudal, composed entirely of spines, of which a few anterior ones are weak.

Anal fin commencing a little in front of the middle of total length, composed of a couple of spines and a large number of split rays, continuous with the caudal.

Caudal fin moderately long, pointed.

Ventrals absent.

Abdominal viscera as in *Cryptacanthodes*. The stomach is a simple straight sac. The intestine is short (three-fourths of total length in the typical species). Pyloric cæca few, short, not greatly unequal in size.

Type, Delolepis virgatus Bean.

The close resemblance of *Delolepis* to *Cryptacanthodes* will be at once observed. The two are nearly identical in every other respect save the dermal structure. The muciferous channels are more developed in *Cryptacanthodes*, but the arrangement is similar. *Delolepis* is, therefore, established as a distinct genus mainly on the single character of developed scales, a character which I consider of sufficient importance in this small family to serve as a basis of subdivision.

### 7. Delolepis virgatus, new species.

Captain Nichols forwarded two fine specimens of the fish which is here described: one of them taken at the head of Kingcombe Inlet, British Columbia, in 18 fathoms of nearly fresh water, August 2, 1880 (numbered 86 in the collector's list and called "eel"); the other caught at Port Wrangel, Alaska, in the latter part of August, 1880 (numbered 111 in collector's list and called "eel"). These types are numbered 29149 and 29150 in the United States National Museum Fish Register. The smaller is 470 millimeters ( $18\frac{7}{10}$  inches) and the larger 795 millimeters ( $31\frac{2}{10}$  inches) in length.

The body is eel-shaped, moderately compressed and tapering in its second half; its greatest height, which is about midway between pectoral and vent, contained 11 times in total length and equal to greatest width of head; greatest width of body slightly exceeds length of upper jaw. Beginning at a short distance behind the origin of the dorsal fin small, oblong, cycloid scales, closely imbricated, cover a strip of the body along the region traversed by the lateral line; the scaled area gradually widens until, from the vent backward, the whole tail is covered except a very narrow strip along the dorsal and anal fin bases.

The length of the head to end of operculum is contained from 6 to 6\frac{1}{3} times in total length; its width and depth are nearly equal. Width of interorbital area, measured on the bone, equals length of snout and one-third of length of lower jaw. The supramaxillary extends a little behind the eye; its length is contained 3 times in distance from snout to dorsal fin. The length of lower jaw is contained 12\frac{1}{2} times in total length. The eye is one-half as long as the snout and one-eleventh as long as the head. The nostrils are placed immediately behind the upper lip and as far apart as the limits of the interorbital space.

0

The dorsal fin begins at a distance from the snout equal to twice the greatest depth of head, or just over the upper angle of the gill-opening. The first spine is half as long as the 71st, which is the longest of all. The fin is continuous with the caudal.

The two anal spines are of nearly equal length, being about one-third as long as the longest anal ray. The distance of anal from snout is 3 times distance of pectoral from snout.

The caudal is developed but connate with dorsal and anal; its length is contained from 10 times to 124 times in total length.

The distance of pectoral from snout is contained  $6\frac{1}{2}$  times in total length. The length of pectoral equals one-third length of head to upper angle of gill-opening.

Body of the smaller type brownish yellow, top of head brown, lips and forehead dotted with dark brown, branchiostegal membrane and lower part of head whitish, a brown stripe along lateral line, another along the back nearer to dorsal fin than to lateral line, and a third indistinct one along anal base; vertical fins, with a dark margin, which becomes wider and involves almost the whole surface posteriorly; pectoral brownish, mingled with lighter; caudal mostly dark. In the larger example the general color is violet brown, the dotting and stripes are almost black, the dark margins of the vertical fins are absent except posteriorly, and there is less whitish color on the lower parts.

## List of specimens.

29149 (86)—(type). Kingcombe Inlet, Brit. Col. Aug. 2, 1881. 29150 (111)—(type). Wrangel, Alaska. Aug. 2, 1881.

The first was caught at the head of the inlet, in nearly fresh water, 18 fathoms.

### MEASUREMENTS.

#### Species: Delolepis virgatus.

| Current number of specimen                            |                   |                      | 29150 (111) Port Wrangel, Alaska. |                   |
|---|-------------------|----------------------|-----------------------------------|-------------------|
|   |                   |                      |                                   |                   |
|   | Milli-<br>meters. | 100ths of<br>length. |                                   | 100ths of length. |
| Extreme length.                                       | 470               |                      | 795                               |                   |
| Length to end of middle caudal rays                   | 470               | 100                  | 795                               | 100               |
| Body.   | 43                | 0                    | 77                                | 9. 7              |
| Greatest height<br>Greatest width                     | 43<br>32          | 9 7                  | 60                                | 7. 67             |
| Height at pectoral                                    | 36                | 7, 66                | 73                                | 9. 18             |
| Height at anus  | 37                | 8                    | 67                                | 8, 43             |
| Head.   |                   |                      |                                   |                   |
| Greatest length                                       | 78                | 16. 6                | 126                               | 15. 85            |
| Distance from snout to nape                           | 51                | 10.8                 | 89                                | 11.2              |
| Greatest width  | 42                | 9                    | 78<br>71                          | 9, 81             |
| Greatest depth Width of interorbital area on the bone | 40<br>13          | 8. 5<br>2. 77        | 22                                | 2, 76             |
| Length of snout                                       | 13                | 2.77                 | 21                                | 2. 64             |
| Length of operculum                                   | 9.3               | 5                    | 38                                | 4, 78             |
| Length of supra-maxillary                             | 27                | 5, 74                | 50                                | 6, 20             |
| Length of upper law                                   | 30                | 6.38                 | 55                                | 7                 |
| Length of mandible                                    | 38                | 8                    | 64                                | 8                 |
| Distance from snout to orbit.                         | 15                | 3. 19                | 25                                | 3. 14             |
| Diameter of orbit                                     | 7                 | 1.5                  | 11                                | 1.38              |

#### Measurements-Continued.

|   | Milli-           | 100ths of                 | Milli-                | 100ths of                    |
|---|------------------|---------------------------|-----------------------|------------------------------|
|   | meters.          | length.                   | meters.               | length.                      |
| Dorsal (spinous). Distance from snout Length of longest spine (71st). Length of first spine Length of last spine                  | 19<br>10         | 17<br>4<br>2. 13<br>3. 83 | 148<br>29<br>16<br>25 | 18. 6<br>3. 64<br>2<br>3. 14 |
| Anal.  Distance from snout.  Length of first spine.  Length of second spine.  Length of first ray.  Length of longest ray (45th). | 217              | 46                        | 386                   | 48. 55                       |
|   | 8                | 1.7                       | 13                    | 1. 63                        |
|   | 9                | 1.91                      | 16                    | 2                            |
|   | 15               | 3.19                      | 21                    | 2. 64                        |
|   | 27               | 5.74                      | 37                    | 4. 65                        |
| Length of last ray Caudal. Length of middle rays Pectoral. Distance from snont  | 21               | 4. 5                      | 31                    | 4                            |
|   | 47               | 10                        | 64                    | 8                            |
|   | 74               | 15. 33                    | 125                   | 15. 72                       |
| Length Branchiostegals Dorsal Anal Pectoral Vumber of greed appendence  | lxxvii<br>II, 47 | 6                         | II, 46<br>14          | 5. 4                         |
| Number of cæcal appendages Length of longest appendage Length of shortest appendage. Length of intestine                          | 35<br>15         |                           |                       |                              |

### 8. Lumpenus anguillaris (Pallas) Girard.

29801 (112). Wrangel, Alaska. Aug. -, 1881.

29801 (122). Sitka, Alaska. Sept. 13, 1881.

Length of first, 11 inches; of second exactly the same. Vomer without trace of teeth.

# 9. Xiphister mucosus (Girard) Jordan.

29815 (113). Wrangel, Alaska. Aug. -, 1881.

Two examples  $7\frac{1}{2}$  to 8 inches long. D. LXXVI; A. 49-50. In these specimens, which I have provisionally referred to *mucosus*, the occiput is equidistant from snout and dorsal; the anal origin is a little nearer the snout than the tip of caudal; the dorsal spines and anal rays are as in *X. rupestris*; the pectoral is as long as the eye. There is, consequently, a little difficulty in deciding what are the closest affinities of the examples here considered. A re-examination of all the Alaskan specimens of *X. rupestris* (so called in my preliminary catalogue, published Dec. 24, 1881) reveals a similar intermingling of the characters of *rupestris* and *mucosus* to some extent.

# 10. Anoplarchus atropurpureus (Kittlitz) Gill.

30221 (96). Port McLaughlin, Brit. Col. Aug. 6, 1881.

29814 (113). Wrangel, Alaska. Aug. —, 1881.

No. 30221, two specimens, found on the beach at low water. No. 29814 includes six individuals, of which the largest two were  $4\frac{1}{2}$  and  $5\frac{2}{3}$  inches long, respectively, with the following fin rays: smaller, D. 57, A. 40; larger, D. 55, A. 40.

I have examined many Alaskan specimens of *Anoplarchus* without finding one that has as many spines and anal rays as *A. alectrolophus*. (Pallas) Jor. & Gilb.

### 11. Murænoides ornatus (Girard) Gill.

29813 (113). Wrangel, Alaska. Aug. —, 1881.

Ten individuals varying in length from  $3\frac{1}{5}$  to  $7\frac{1}{5}$  inches. The largest has the following radial formula; D. 87; A. II, 38.

### 12. Gobius Nicholsii, new species.

The type of the present description (catalogue number 29803, collector's number 78) was secured by Captain Niehols at Departure Bay, British Columbia, July 26, 1881. It was found at a depth of 20 fathoms.

The species is closely related to *Coryphopterus glaucofrænum* Gill but differs from this in (1) its radial formula, (2) relative proportions, and (3) coloration.

The extreme length of the single typical specimen is 112 millimeters (four and two-fifths inches).

The body is stout, compressed, its greatest height under the middle of the spinous dorsal contained 6 times in the extreme length given above. The least height of the tail is about equal to the greatest width of body. The length of caudal peduncle equals nearly one and one-half times its height.

Head scaleless, nape showing mere traces of undeveloped scales. The width of head exceeds its greatest depth and equals two-thirds of its length. The length of head is contained four and two-thirds times in extreme length. The eyes are separated by a narrow interspace equal to one half of their long diameter. The obtuse, declivous snout is about as long as the eye. Nostrils double, not tubular, close together near eye, in a line with pupil. The intermaxillaries are slightly protractile downward. The upper jaw extends to the vertical through the anterior edge of pupil; the mandible, to below middle of pupil. The eye is one-fourth as long as the head. On the vertex and nape there is an inconspicuous median fold of skin simulating a crest. The lower jaw protrudes very slightly. Teeth in the jaws slender, conical, slightly recurved, pluriserial, the outer series somewhat enlarged; no canines. Gill-openings separated by a wide isthmus.

Distance of spinous dorsal from snout equals twice length of its base, and, also, twice height of body at ventrals. The first spine equals one-half length of head. The second spine is one-half as long as base of second dorsal. The last spine is as long as lower jaw. The dorsals are separated by a very small space, scarcely equal to that between the eyes. The last two rays of the soft dorsal are almost as long as head and more than twice as long as the first ray.

The vent is midway between end of snout and origin of middle caudal

rays. Anal papilla one-half as long as eye and equal to interorbital distance. The anal is similar to the soft dorsal in form and is apparently made up of rays only, the first of which is one-third as long as the last and the last but one. The last anal ray is five-sixths as long as head; it extends backward to a vertical through origin of middle caudal rays, while the last dorsal ray extends beyond this line. The anal ends slightly in advance of the end of soft dorsal.

Caudal convex behind (imperfect in the typical example), nearly as long as the head.

The middle pectoral rays are longest, about equal to length of head. None of the pectoral rays are free and silk-like.

The ventral originates immediately beneath the pectoral origin and does not reach to vent; its length equals greatest height of body (three-fourths length of head).

Br. v; D. VI,  $13\frac{1}{1}$ ; A.  $11\frac{1}{1}$ ; C. 13 (developed); P. 20; v. i, 5; L. lat. 26; L. trans. 10.

Colors.—Top of spinous dorsal black. Second dorsal and caudal spotted with dark color. Anal with some traces of dark color on its first half. Ventrals black. Body and tail olivaceous, a broad dusky margin on all the scales. Head colored like body but cheeks dusky and traces of purplish on side of snout.

Dedicated to Capt. Henry E. Nichols, U. S. N.

#### MEASUREMENTS.

#### Species: Gobius Nicholeii

| Current number of specimen  | 29803.                                 |
|---|--|
| Locality  |  |
| (   | Departure<br>Bay, British<br>Columbia. |
|   | Millimeters.                           |
| Extreme length  | About 112<br>90                        |
| Body: Greatest height Greatest width. Height at ventrals Least height of tail           | 12                                     |
| Length of caudal peduncle.  Head: Greatest length                                       | 15                                     |
| Greatest width Width of interorbital area. Leugth of snout Length of operculum          | 3 5                                    |
| Length of maxillary Length of intermaxillary Length of mandible Long diameter of eye    | . 10                                   |
| Short diameter of eye Dorsal (spinous): Distance from snout                             | . 5                                    |
| Length of base. Length of first spine Length of second spine Length of last spine (6th) | 12<br>13                               |
| (soft): Length of base Length of first ray. Length of longest rays (13th and 14th).     | _  10                                  |

#### MEASUREMENTS-Continued.

|  | Millimeters.   |
|--|--|
| Anal:  Distance from snout.  Length of base. Distance of vent from snout.  Length of first ray. Length of longest ray (11th) Length of longest ray.  Caudal: Length of middle rays Pectoral: Distance from snout. Length Ventral: Distance from snout. Length Branchiostegals Dorsal Anal Caudal Pectoral Ventral: Distance from snout. Length Number of transverse rows above lateral line. Number of transverse rows below lateral line. | 19<br>49<br>7<br>21<br>20<br>About 22<br>25<br>23<br>26<br>19<br>VI, 13†<br>12<br>+13+<br>20<br>1, 5 |

### 13. Cottus polyacanthocephalus Pallas.

29139 (84). Head of Kingcombe Inlet, Brit. Col. Aug. 2, 1881.

29140 (94). Port McLaughlin, Brit. Col. Aug. 5, 1881.

29141 (98). Port Simpson, Brit. Col. Aug. -, 1881.

29142 (106.) Wrangel, Alaska. Aug. —, 1881.

29139.—Length  $4\frac{3}{10}$  inches. D. X, 13; A. 12; found in 18 fathoms, nearly fresh water.

29140.—Length  $12\frac{3}{10}$  inches. D. X, 14; A. 12; in 14 fathoms of water.

29141.—Length 12½ inches. D. X, 14; A. 11; in 14 fathoms. The middle preopercular spine of the right side is distinctly bifid, as a result, no doubt, of some early injury. This species sometimes has two, but usually three, developed preopercular spines.

29142.—Length 6 inches. D. IX, 14; A. 12.

### 14. Gymnacanthus galeatus Bean.

29144 (102) &. Chaean, Alaska. Aug. 15, 1881.

29145 (116). Sitka, Alaska. Sept. 13, 1881.

The first of these is  $8\frac{1}{10}$  inches long and bears out the characters of the species fully as to armature of head, depth of body about half length of head, &c. D. XI, 16; A. 18. Ventral reaches to third anal ray. From 10 fathoms of water.

The smaller individual is  $4\frac{9}{10}$  inches long, and also has the characters of the adult.

### 15. Artedius notospilotus Girard.

29143 (80). Drew's Harbor, Brit. Col. July 27, 1881.

Length 5 inches. D. IX, 17; A. 13; V. I, 3. Caught in 12 fathoms.

16. Hemilepidotus trachurus (Pallas) Günther.

29138 (117). Sitka, Alaska. Sept. 13, 1881.

A single example 12 inches long. D. III + VIII,  $18\frac{1}{1}$ ; V. I, 4. Four rows of scales in dorsal band.

## 17. Oligocottus maculosus Girard.

29816 (113). Wrangel, Alaska. Aug. -, 1881.

There are two examples, the larger measuring  $3\frac{1}{10}$  inches, the smaller  $2\frac{7}{10}$  inches. The fin rays of both are alike: D. VIII, 17; A. 13. The first dorsal is only two-thirds as high as the second. The preopercular spine is bifid, with hooks incurved.

## 18. Sebastichthys maliger Jordan & Gilbert.

29130 (93). Port McLaughlin, Brit. Col. Aug. 5, 1881.

A large example 15 inches long and 5 inches deep. D. XII, I, 13; A. III, 7. The abdominal cavity is well supplied with tape-worm-like entozoa. The fifth dorsal spine has been broken off, so that it is little longer than the second, yet it has acquired a remarkably sharp point. This specimen is *very* much like an overgrown *caurinus*, yet it has the characters ascribed to *maliger*. Caught in 14 fathoms of water.

## 19. Sebastichthys caurinus (Rich.) Jordan & Gilbert.

29807 (77) (juv.). Departure Bay, Brit. Col. July 26, 1881.

29806 (124) (juv.). Rose Harbor, Queen Charlotte Island. Sept. 18, 1881.

29808 (103) (juv.). Chaean, Alaska. Aug. 16, 1881.

The smallest (No. 29808) is probably young melanops; it is  $4\frac{7}{10}$  inches long and has the following fin rays: D. XII, I, 15; A. III, 8. These individuals measure  $4\frac{4}{5}$ ,  $6\frac{1}{2}$ , and  $6\frac{7}{10}$  inches respectively; their fin rays are: D. XII, I, 12, A. III, 6; D. XII, I, 13, A. III, 6; D. XII, I, 13, A. III, 7. Number 29807 includes 2 specimens taken in 20 fathoms.

# 20. Sebastichthys ruber (Ayres) Lockington.

29129 (115). Kygani Strait, Alaska. Sept. 1, 1881.

Length of the single specimen, 19 inches. D. XII, I, 16; A. III, 8. The mandibular knob projects  $\frac{3}{10}$  of an inch forward. The longest gill-rakers are nearly one inch long, equal to the distance between the anterior pair of nostrils. There are 36 rakers on the first arch, some of them distinctly club-shaped.

# 21. Sebastodes paucispinis (Ayres) Gill.

29131 (95). Port McLaughlin, Brit. Col. Aug. 6, 1881.

Length  $14\frac{3}{4}$  inches. D. XIII, I, 14; A. III, 7; V. I, 5. Caught in 14 fathoms of water.

### 22. Hexagrammus asper Steller.

29133 (97). Near Port Simpson, Brit. Col. Aug., 1881.

Length of specimen, 10 inches. The uppermost lateral line extends to the 17th dorsal spine. D. XXIII, 21; A. 24.

Captain Nichols catalogues this as from a fresh-water lake near Port Simpson.

## 23. Hexagrammus superciliosus (Pallas) Jordan & Gilbert.

29132 (125). Rose Harbor, Queen Charlotte Island. Sept. 18, 1881. Length of specimen, 12½ inches. A brilliantly colored individual, with black, white, crimson, and brown finely contrasted. Scales decidedly etenoid (!) except on head and pectoral bases.

## 24. Hexagrammus decagrammus (Pallas) Jordan & Gilbert.

29134 (118). Sitka, Alaska. Sept. 13, 1881.

29135 (126). Nootka Sound, Vancouver Island. Sept. 13, 1881.

29136 (127). Nootka Sound, Vancouver Island. Sept. 13, 1881.

29137 (129). Nootka Sound, Vancouver Island. Sept. 13, 1881.

29134 & 13 inches long; 29135 &  $11\frac{4}{5}$  inches long; 29136 \( \varphi \) 9 inches long; 29137 \( \varphi \) 12\( \frac{1}{4} \) inches long. The last three were caught in Friendly Cove.

### 25. Anoplopoma fimbria (Pallas) Gill.

29117 (99). Port Simpson, Brit. Col. Aug. —, 1881.

29118 (83). Head of Kingcombe Inlet, Brit. Col. Aug. 2, 1881.

29119 (105). Wrangel, Alaska. Aug. 17, 1881.

29117 is 14½ inches long; 1 D. 19; 2 D. 17; A. 18; top of second dorsal and tips of caudal white. Caught in 14 fathoms of water.

29118 measures  $13\frac{1}{4}$  inches; 1 D. 19; 2 D. 19; A. 19; 18 fathoms, nearly fresh water. 29119 is  $17\frac{3}{4}$  inches long; 1 D. 21; 2 D. 17; A. 18.

# 26. Damalichthys argyrosomus (Girard) Jordan & Gilbert.

29811 (128). Friendly Cove, Nootka Sound, Vancouver Island. 1881. Fourteen inches long; D. X, 22; A. 29; L. lat., 66; L. transverse, 7+17.

## 27. Mallotus villosus (Müller) Cuv.

29812 (123). Sitka, Alaska. Sept. 13, 1881.

There are 12 specimens of this species ranging from about 4 inches to 4½ inches in length. One individual examined had: D. 14; A. 24; V. 8; P. 18.

# 28. Salvelinus malma (Walb.) Jordan & Gilbert.

29148 (100). Near Port Simpson, Brit. Col. Aug. —, 1881.

A very plump specimen, one foot in length, taken from a fresh-water lake near Port Simpson. No external parasites are present.

#### 29. Chimæra Colliei Bennett.

29123 (91). 3. Safety Cove, Brit. Col. Aug. 4, 1881. Length, 19 inches.

### 30. Raia binoculata Girard.

29805 (92). (Head.) Safety Cove, Brit. Col. Aug. 4, 1881. 29804 (108). (Head.) Wrangel, Alaska. Aug. —, 1881.

Teeth of first,  $\frac{44}{40}$ ; of second,  $\frac{47}{45}$ . The second is a much larger individual than the first. The first was caught in 16 fathoms.

## 31. Squalus acanthias Linn.

29121 (79). 8. Drew's Harbor, Brit. Col. July 27, 1881.

29122 (81). J. Menzie's Bay, Brit. Col. July 31, 1881.

29120 (101). Q. Red Bay, Alaska. Aug. 14, 1881.

Length of 29121 is  $2\frac{1}{2}$  feet. No. 29122 is  $21\frac{1}{2}$  inches long. 29120 is 29 inches long. The snout of the female is more obtuse than in the two males. All of these specimens have a low keel along the lower margin of the caudal peduncle from the end of the second dorsal to the root of the caudal, just as in Atlantic specimens.

These three dogfish were caught in 12, 5, and 12 fathoms, respectively. UNITED STATES NATIONAL MUSEUM,

January 31, 1882.

# ON THE RARE RODENT, CRICETODIPUS PARVUS (BAIRD) COUES.

## BY FREDERICK W. TRUE.

At the time when Dr. Elliott Coues published his valuable monograph of the Saccomyidæ\* the United States National Museum possessed but four specimens of the species *Cricetodipus parvus* Baird—two of them in bad condition—including the single type-specimen of Professor Baird. On account of this scarcity of material he was forced to speak very cautiously regarding the animal, leaving it uncertain whether it was a distinct species or merely a variety of *C. flavus* Baird.

In an interesting collection of rodents in alcohol, recently received into the Museum from Mr. Gustav Eisen, of Fresno, Cal., I found nine additional specimens of this doubtful species, seven of which are in perfect condition. A careful examination of these has convinced me that *C. parvus* is a distinct species. The averages at the bottom of the following table of measurements, compared with those given by Dr. Coues for *C. flavus*,† bring out, I think, very clearly the characteristic differences of the two species.

<sup>\*</sup>Coues. Report, U. S. Geol. Surv. of the Territories, xi, 1877. Monograph VIII, pp. 481-542.

t Coues, l. c., p. 518.